

Storm Analysis

Water levels along the eastern coast of Florida are elevated due to high winds produced by the interaction of Tropical Storm NOEL with a high pressure system across the southeastern U.S.

Water level and meteorological plots available below are updated automatically. Water level observations on <u>Mean Lower Low Water</u> as of 10/31/2007 1100 EDT are:

Vaca Key, FL ~ 0.28 ft (0.1 m) above predicted. Next High tide Thu 11/01/2007 at 05:50 EDT ~ 1.6 ft (0.48 m).

Virginia Key, FL  $\sim$  0.97 ft (0.30 m) above predicted. Next High tide Wed 10/31/2007 at 14:13 EDT  $\sim$  2.60 ft (0.79 m).

Trident Pier, FL ~ 0.97 ft (0.30 m) above predicted. Next High tide Wed 10/31/2007 at 12:47 EDT ~ 4.60 ft (1.40 m).

Ponce De Leon Inlet South, FL ~ 1.51 ft (0.46 m) above predicted. Next High tide Wed 10/31/2007 at 13:34 EDT

#### Tropical Storm NOEL QUICKLOOK, POSTED 12:00 EDT 10/31/2007

~3.40 ft (1.04 m).

Mayport (Bar Pilots Dock), FL  $\sim$  0.64 ft (0.20 m) above predicted. Next High tide Wed 10/31/2007 at 13:46 EDT  $\sim$  5.60 ft (1.71 m).

Fernandina Beach, FL  $\sim$  0.82 ft (0.25 m) above predicted. Next High tide Wed 10/31/2007 at 13:53 EDT  $\sim$  6.90 ft (2.10 m).

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#### **SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:**

TROPICAL STORM NOEL ADVISORY NUMBER 16 1100 AM EDT WED OCT 31 2007

...NOEL STRENGTHENS AFTER MOVING OFFSHORE OF THE NORTH COAST OF CUBA...

INTERESTS IN SOUTHERN FLORIDA SHOULD CLOSELY MONITOR THE PROGRESS OF NOEL. AS NOEL MOVES NORTHWARD TODAY ITS WIND FIELD WILL APPROACH SOUTHEAST FLORIDA AND THE EXISTING WIND ADVISORY AND GALE WARNING MAY NEED TO BE REPLACED BY A TROPICAL STORM WARNING. IN EITHER CASE WINDS NEAR GALE/TROPICAL STORM STRENGTH ARE LIKELY TO CONTINUE ALONG THE COAST DURING THE NEXT 24 HOURS.

AT 1100 AM EDT THE CENTER OF TROPICAL STORM NOEL WAS ABOUT 175 MILES...280 KM...SOUTH-SOUTHWEST OF NASSAU.

NOEL IS MOVING TOWARD THE NORTH-NORTHWEST NEAR 8 MPH...13 KM/HR. A TURN TO THE NORTH IS EXPECTED LATER TODAY.

MAXIMUM SUSTAINED WINDS HAVE INCREASED AND NOW ARE NEAR 50 MPH...85 KM/HR...WITH HIGHER GUSTS.

For additional data and more information on the Storm QuickLook product, please visit www.tidesandcurrents.noaa.gov.

Water Level Analyst:LH

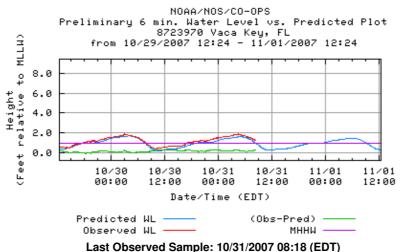
For the purpose of timely release, data contained within this QUICKLOOK have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: <u>Vaca Key - Water Level</u>, <u>Vaca Key - Winds</u>, <u>Vaca Key - Barometric</u>, <u>Virginia Key - Water Level</u>, <u>Virginia Key - Winds</u>, <u>Trident Pier - Water Level</u>, <u>Trident Pier - Winds</u>, <u>Trident Pier - Barometric</u>, <u>Ponce De Leon Inlet South - Water Level</u>

# Tropical Storm NOEL QUICKLOOK, POSTED 12:00 EDT 10/31/2007

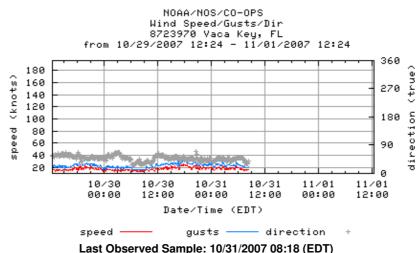
<u>Level, Mayport (Bar Pilots Dock) - Water Level, Mayport (Bar Pilots Dock) - Winds, Mayport (Bar Pilots Dock) - Barometric, Fernandina Beach - Water Level, Fernandina Beach - Barometric, Pernandina Beach - Barometric, Fernandina Beach - Barometric,</u>

## Vaca Key, FL - Station Map Return to List



Relative to MLLW: Observed: 1.28 ft. Predicted: 1.00 ft. Residual: 0.28 ft. Historical Maximum Water Level: 10/07/1974, 1.42 ft. above MHHW

## Vaca Key, FL - Station Map Return to List



Wind Speed: 17 knots Gusts: 21 knots Direction: 039° T

### Vaca Key, FL - Station Map Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 8723970 Vaca Key, FL from 10/29/2007 12:24 - 11/01/2007 12:24 1026 1024 1022 1020 Pressure 1018 1016 1014 1012 1010 1008 10/30 10/30 10/31 10/31 11/01 11/01 00:00 12:00 00:00 12:00 00:00 12:00 Date/Time (EDT)

> barometric pressure ——— Last Observed Sample: 10/31/2007 08:18 (EDT)

> > **Barometric Pressure: 1009.1 mb**

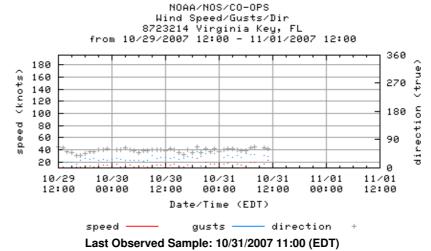
#### Virginia Key, FL - Station Map Return to List

NOAA/NOS/CO-OPS Preliminary 6 min. Water Level vs. Predicted Plot 8723214 Virginia Key, FL from 10/29/2007 12:00 - 11/01/2007 12:00 Height relative to MLLW) 8.0 6.0 4.0 2.0 0.0 (Feet 10/29 10/31 10/31 11/01 11/01 10/30 10/30 12:00 12:00 00:00 12:00 00:00 12:00 00:00 Date/Time (EDT) Predicted WL (Obs-Pred) Observed WL мнни

Last Observed Sample: 10/31/2007 11:42 (EDT)

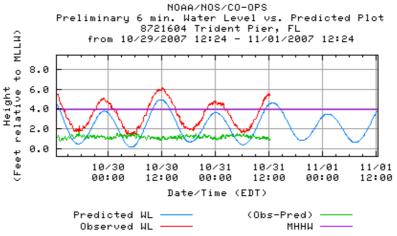
Relative to MLLW: Observed: 2.77 ft. Predicted: 1.86 ft. Residual: 0.91 ft. Historical Maximum Water Level: 11/15/1994, 1.9 ft. above MHHW

## Virginia Key, FL - Station Map Return to List



Wind Speed: 22 knots Gusts: 29 knots Direction: 062° T

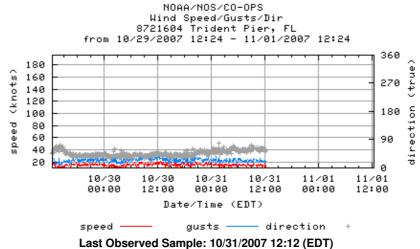
#### Trident Pier, FL - Station Map Return to List



Last Observed Sample: 10/31/2007 12:12 (EDT)

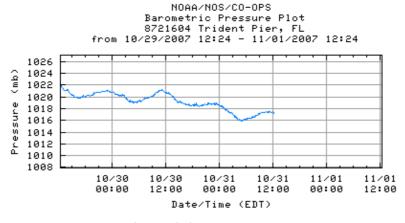
Relative to MLLW: Observed: 5.38 ft. Predicted: 4.54 ft. Residual: 0.84 ft. Historical Maximum Water Level: 09/16/2001, 2.28 ft. above MHHW

### Trident Pier, FL - Station Map Return to List



Wind Speed: 12 knots Gusts: 21 knots Direction: 055° T

#### Trident Pier, FL - Station Map Return to List

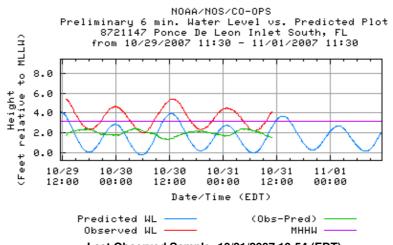


barometric pressure ———

Last Observed Sample: 10/31/2007 12:12 (EDT)

**Barometric Pressure: 1017.2 mb** 

### Ponce De Leon Inlet South, FL - Station Map Return to List

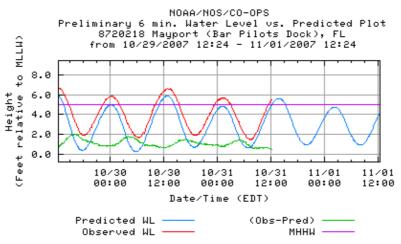


Last Observed Sample: 10/31/2007 10:54 (EDT)

Relative to MLLW: Observed: 4.12 ft. Predicted: 2.61 ft. Residual: 1.51 ft.

Historical Maximum Water Level: 11/03/1978, 1.67 ft. above MHHW

#### Mayport (Bar Pilots Dock), FL - Station Map Return to List

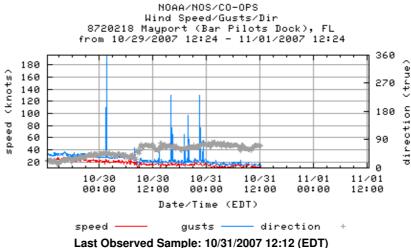


Last Observed Sample: 10/31/2007 12:12 (EDT)

Relative to MLLW: Observed: 5.48 ft. Predicted: 5.00 ft. Residual: 0.48 ft.

Historical Maximum Water Level: 09/17/2001, 2.15 ft. above MHHW

## Mayport (Bar Pilots Dock), FL - Station Map Return to List



Wind Speed: 11 knots Gusts: 13 knots Direction: 069 ° T

#### Mayport (Bar Pilots Dock), FL - Station Map Return to List

10/30

00:00

10/30

12:00

NOAA/NOS/CO-OPS

Barometric Pressure Plot 8720218 Mayport (Bar Pilots Dock), FL from 10/29/2007 12:24 - 11/01/2007 12:24

Date/Time (EDT)
barometric pressure

10/31

00:00

10/31

12:00

11/01

00:00

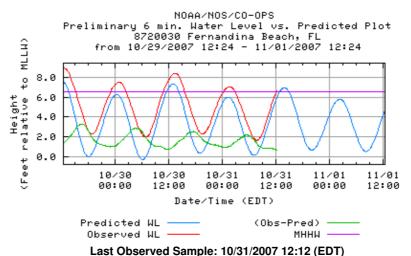
11/01

12:00

Last Observed Sample: 10/31/2007 12:12 (EDT)

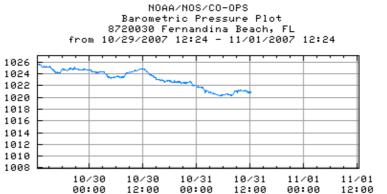
**Barometric Pressure: 1021.4 mb** 

## Fernandina Beach, FL - Station Map Return to List



Relative to MLLW: Observed: 6.61 ft. Predicted: 5.96 ft. Residual: 0.65 ft. Historical Maximum Water Level: 10/02/1898, 6.94 ft. above MHHW

## Fernandina Beach, FL - Station Map Return to List



Date/Time (EDT)
barometric pressure

Last Observed Sample: 10/31/2007 12:12 (EDT)

**Barometric Pressure: 1020.7 mb** 

# Tropical Storm NOEL QUICKLOOK, POSTED 12:00 EDT 10/31/2007

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS) National Oceanic and Atmospheric Administration | U.S. Department of Commerce